US Army Corps of Engineers
Seattle District

Notice of Preparation / Clean Water Act Public Notice

Planning, Environmental and
Cultural Resources Branch
P.O. Box 3755
Seattle, WA 98124-3755
ATTN: Zachary Wilson (PMP-E)

Public Notice Date: 13 December 2017
Expiration Date: 12 January 2017
Reference: PL-18-06
Name: Meadowhurst Levee Rehabilitation

Interested parties are hereby notified that the U.S. Army Corps of Engineers, Seattle District (Corps) plans to prepare, pursuant to the National Environmental Policy Act (NEPA), an environmental assessment (EA) for proposed levee repairs on the St. Joe River (Meadowhurst Levee) near the City of St. Maries, Benewah County, Idaho. Repairs are intended to address damage caused during the March 2017 flood event when a combination of snowmelt and rainfall resulted in a sustained river level above flood stage of the St. Joe River. The purpose of this Notice of Preparation is to solicit comments from interested persons, groups, and agencies on the Corps' proposed action under NEPA.

A further purpose of this Notice is to solicit comments on the proposed disposal of fill material into the waters of the U.S. under the Clean Water Act. This Public Notice is being issued in accordance with rules and regulations published as 33 CFR 335 "Operation and Maintenance of Army Corps of Engineers Civil Works Projects Involving the Discharge of Dredged or Fill Material into Waters of the U.S. or Ocean Waters"; 33 CFR 336 "Factors to be Considered in Evaluation of Army Corps of Engineers Dredging Projects Involving the Discharge of Dredged Material into Waters of the U.S. and Ocean Waters"; 33 CFR 337 "Practice and Procedure"; and 33 CFR 338 "Other Corps Activities Involving the Discharge of Dredged Material or Fill into Waters of the U.S."

AUTHORITY

The proposed levee repair is authorized by Public Law 84-99 (33 U.S. Code Section 701n). Corps rehabilitation and restoration work under this authority is limited to flood control works damaged or destroyed by floods. The statute authorizes rehabilitation to the level of protection exhibited by the flood control work prior to the damaging event. The Meadowhurst Diking District is the non-federal sponsor for this project.

NEED

High river flows in the St. Joe River resulted in erosion of the levee slope and toe, including loss of riprap and embankment material. The approximate area of missing material is triangular, 5 feet high and 10 feet wide along the length of the repair sites. There are two damage sites: 300

feet that has damaged embankment toe with existing piling (Site 1); 100 feet that has damaged embankment toe and no existing piling (Site 2). The total length of repair is approximately 400 feet. The levee requires an emergency repair to ensure reliable flood protection for the community of Meadowhurst, near the City of St. Maries. In the damaged state, the level of protection is diminished from 50-yr level of flood protection to a 3-yr level of flood protection. The location of the damaged levee is shown in Attachment A and photographs of the damage are in Attachment B.

PURPOSE

The purpose of the project is to repair the damaged levee and return it to the level of flood protection found prior to the March 2017 flood event in order to protect lives and property from potential future flooding.

PROPOSED ACTION

Multiple alternatives for the repair may be considered as follows:

- No Action. The no-action alternative would leave the levee in its current condition. This would result in a reduced level of protection and the greater probability of increased damages or breaching during future flooding.

- Repair In-Kind Alternative with Modification (Preferred Alternative). This alternative would restore the damaged levee sections to a condition similar to existing undamaged sections in the vicinity which relies on piling and riprap for erosion protection. All work would occur from a barge with no surface access at the construction site. Construction would occur in summer (July and August) and take no more than 6 weeks to complete. A total of 370 cubic yards of armor is estimated for the repair. See Attachment C for a draft cross section.

  Site 1 has existing piling at the riverward toe of the levee and is experiencing erosion and loss of toe armor protection along 300 feet. Site 1 would require replacing missing riprap in the eroded toe section, approximately 5 feet high and 10 feet wide.

  Site 2 has no existing piling and is eroded at the toe along 100 feet in a similar fashion as Site 1. Repair would include the use of round pile which is not currently part of the levee cross section at this location. Site 2 would require driving piling at a regular spacing interval and backfilling with riprap armor. This would reduce the amount of fill required to secure the levee toe, maintaining the existing channel and re-establishing the riverward slope to 1.5 to 2 H to 1V.

- Setback Levee. This alternative would shift the alignment of the levee embankment landward by a yet-to-be-determined distance in order to avoid or minimize direct contact with the river current. Typically, the setback would be a newly-constructed earth embankment structure and would include abandonment of the existing levee along the river bank. Construction of a setback levee may be prolonged more costly than other alternatives due to more extensive embankment material requirements; although it would not require a barge or pile-driving operations. This approach would encroach on existing structures and

privately-owned land currently used for residential purposes. On this basis, this alternative would be difficult to implement.

- Non-Structural Alternative. This alternative consists of floodplain management strategies generally involving changes in land use offered by other federal and state programs. Such strategies would include zoning, easements, flood warning, floodplain evacuation, and flood insurance. Nonstructural strategies would also involve acquisition, relocation, elevation, and flood proofing existing structures. The project sponsor has been informed of their options to pursue a Nonstructural Alternative Project and after they considered it, they found it unacceptable.

ANTICIPATED IMPACTS
Impacts anticipated at this point are as follows:

Wetlands. No wetlands were identified at the repair sites during an initial site visit. If wetlands are found, the project will be designed to avoid wetland impacts to the maximum extent practicable. If wetland impacts are unavoidable, compensation for wetland impacts may be pursued. Further impact analysis, consideration of mitigation for any wetland loss, and coordination would occur during the engineering and design phase.

Biological Resources. The following species listed under the Endangered Species Act (ESA) as threatened (T) and their associated designated critical habitat (CH) are located in the project area:

- Bull trout (T) (CH)
- North American Wolverine (Proposed T)

Bull trout are present in the St. Joe River and implementation of the proposed repair has the potential to result in short-term increases in suspended sediment, noise, and turbidity. Bull trout use this portion of the river as a migration corridor to and from upstream spawning habitat. The project is not expected to affect the ability of the St. Joe River to function as migratory habitat for bull trout in the long run. However, short-term noise related impacts to aquatic organisms during pile driving are a possibility. Bull trout are unlikely to be present in the river at the time of repair (July and August) due to elevated water temperatures above the thermal tolerance for bull trout. Wolverines are not expected in the project area due to the lack of suitable habitat, thus there would be no effect to wolverines.

Although bald eagles were delisted under ESA on June 28, 2007, they continue to be protected by the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. These a acts require protection measures to continue to prevent bald eagle "take" resulting from human activities. Impacts to bald and golden eagles will be considered as a part of the NEPA process.

When completed, this levee repair is not intended or expected to generate appreciable change in habitat conditions as compared with conditions pre-existing the flood event. Repair construction work may result in short-term impacts to fish and wildlife. If present, adult and juvenile bull trout may be temporarily displaced from the project area. Construction noise may temporarily disturb any wildlife in the project area. Long-term effects would include continued

channelization of the river as the levee is maintained in its current alignment (the *status quo* condition).

Water Quality. There may be a temporary increase in turbidity due to construction and fill placement. Some grassy vegetation and organic matter inputs into St. Joe River may occur. No long-term impacts are expected.

Cultural Resources. Prior to repairs, a Corps archeologist will conduct a cultural resources survey of the project area to determine whether there is a potential for the proposed repairs to cause effects to historic properties. The Corps will evaluate the project and prepare documentation necessary pursuant to compliance with Section 106 of the National Historic Preservation Act (NHPA). The report will include the findings of the investigations for each repair site, recommendations for archaeological monitoring during construction, and a determination of effects to archaeological and historic properties. The Corps' determinations of effects to historic properties, the investigation report, and monitoring plan if necessary, will be coordinated with the appropriate state and/or tribal historic preservation officers to obtain compliance with Section 106 of the NHPA prior to initiation of construction.

Air Quality. Construction vehicles and heavy equipment would temporarily and locally generate exhaust fumes, carbon dioxide (CO_2), carbon monoxide (CO), and dust on roadways. These emissions would likely be exempt from the conformity requirements under the Clean Air Act, because the project constitutes a routine facility repair activity generating an increase in emissions that is clearly *de minimis*, under 40 CFR 93.153(c)(2)(iv). Emissions would be estimated in the EA to check if levels are *de minimis*. Unquantifiable but insignificant exacerbation of effects of CO_2 emissions on global climate change is also anticipated.

Noise. Temporary increases in noise would occur as a result of rock delivery, rock placement, and pile driving. Private residences are very close to the work sites. Work would be performed during daylight hours to minimize the adverse effects of noise on area residents. Noise impacts are expected to be short in duration with no long-term increases expected.

Traffic. Construction-related traffic would cause minor temporary increases to, and disruption of, local traffic. Efforts would be made to minimize disturbances to traffic patterns during construction through appropriate work hours, signage and notifications, and proper traffic controls.

Cumulative Effects. The currently preferred alternative would maintain the *status quo*. Individually, the project may have small environmental effects resulting from the construction action itself. However, the repair maintains the *status quo* (leveed shoreline) and contributes cumulatively to the existing conditions of the St. Joe River in the St. Maries area.

EVALUATION

The Corps has made a preliminary determination that the environmental impacts of the proposed levee repair can be adequately evaluated under the NEPA through preparation of an EA, which is currently underway.

The project would involve a discharge of fill material into waters of the United States that will be evaluated for substantive compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the Clean Water Act.

The Corps will request certification that the project provides reasonable assurance of compliance with the Water Quality Standards of Idaho State, under Section 401 of the Clean Water Act. In conducting activities involving the discharge of fill material into waters of the United States, the Corps will abide by the applicable conditions of the water quality certification (WQC) to ensure compliance with State water quality standards.

In accordance with Section 7(a)(2) of the ESA, the Corps will consult with the U.S. Fish and Wildlife Service, regarding the impact of the project on listed species and/or designated critical habitat.

The Corps will review the latest published version of the National Register of Historic Places (NRHP), lists of properties deemed eligible, and other sources of information. The Corps will document the current state of knowledge regarding the presence or absence of historic properties and the effects of the undertaking upon the properties.

In preparation of the environmental documentation for this project, coordination has been conducted, is ongoing, or may be initiated with the following public agencies:

(1) U.S. Fish and Wildlife Service
(2) Environmental Protection Agency
(3) Coeur d'Alene Tribe of Indians
(4) Kootenai Tribe of Idaho
(5) Nez Perce Tribe of Idaho
(6) Shoshone-Bannock Tribes
(7) State Historic Preservation Office
(8) Idaho Department of Environmental Quality

PUBLIC INTEREST EVALUATION

The decision to proceed with this action involving the discharge of fill material will be preceded by a determination of whether the proposed activity would be in the public interest. All factors which may be relevant to the proposal's public interest will be considered; among those are navigation and the Federal standard for water quality; wetlands; endangered species; historic resources; scenic and recreation values; fish and wildlife; applicable state/regional/local land use classifications, determinations, and/or policies; conservation; economics; shoreline erosion and accretion; safety; and considerations of property ownership.

As a foundation for its public interest determination the Corps will consider, on an equal basis, all alternatives that are both reasonable and practicable, i.e., available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. The Corps will select the alternative that represents the least costly alternative at the most practicable location, that is consistent with sound engineering practices, and that meets the environmental standards established by the Clean Water Act Section 404(b)(1) evaluation process.

COMMENT AND REVIEW PERIOD

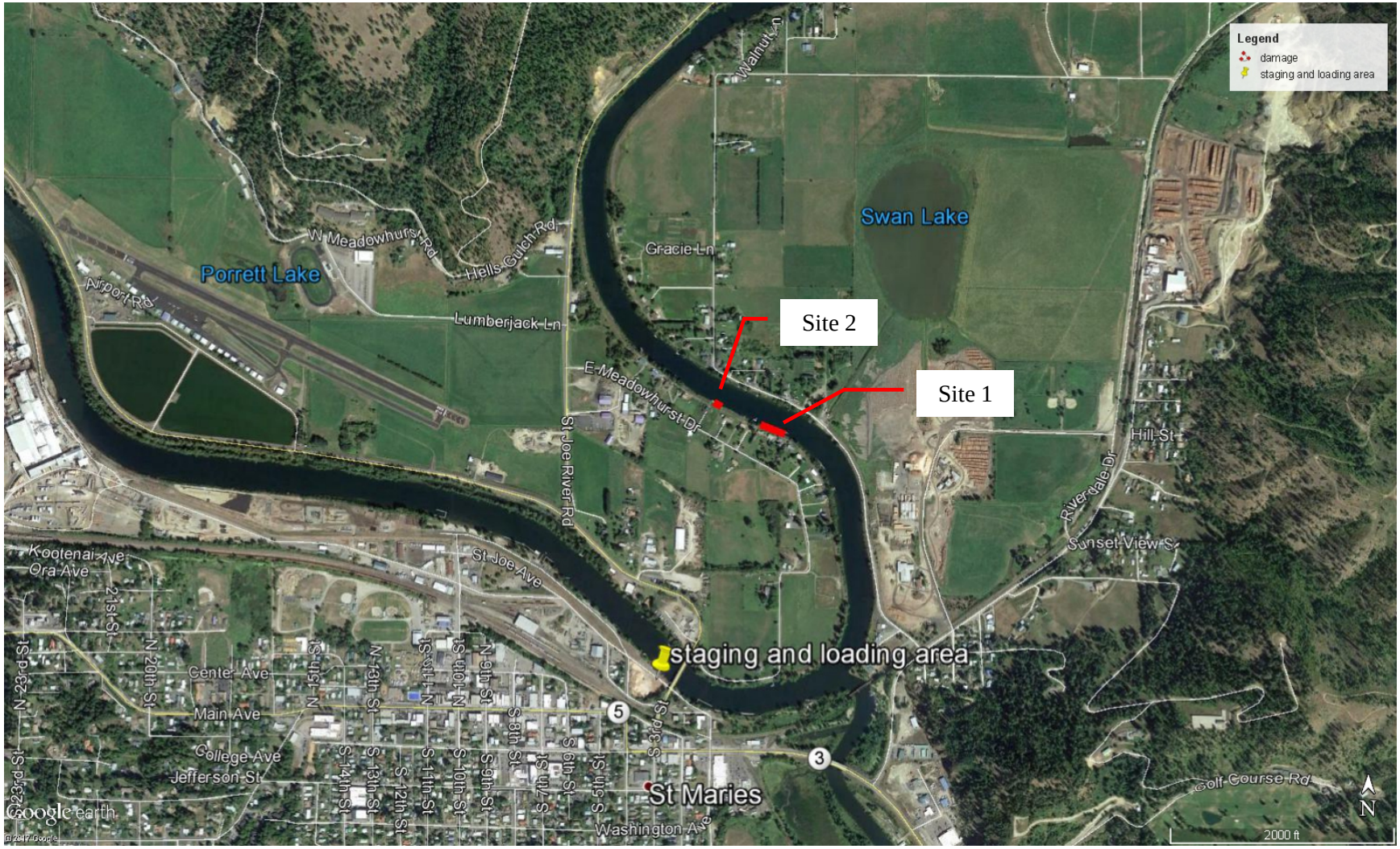
The Corps invites submission of factual comment on the environmental impact of the proposal from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the effects of this activity. To make this decision, comments are used to assess impacts on ESA listed species, historic properties, water quality, general environmental effects, as well as the other public interest factors. Comments will also be considered in determining whether it would be in the public interest to proceed with the proposed project. The Corps will consider all submissions received before the expiration date of this notice. The nature or scope of the proposal may be changed upon consideration of the comments received. The Corps will initiate an Environmental Impact Statement (EIS), and afford the appropriate public participation opportunities attendant to an EIS, if significant effects on the quality of the human environment are identified and cannot be mitigated.

COMMENTS TO THE CORPS OF ENGINEERS

Submit comments to this office, Attn: Environmental and Cultural Resources Branch, no later than *15 days after the date of this notice* to ensure consideration. In addition to sending comments via mail, comments may be e-mailed to Zachary.m.wilson@usace.army.mil. This Notice of Preparation and Clean Water Act Public Notice can be found at the following website: http://www.nws.usace.army.mil/Missions/Environmental/Environmental-Documents/ under "Meadowhurst Levee Rehabilitation." Requests for additional information should be directed to Mr. Zachary Wilson at 206-316-3896 or the above e-mail address.

Enclosed:
Attachment A – Project Location Map
Attachment B – Project Damages
Attachment C – Draft Cross Section

Attachment A – Project Location Map



Attachment B – Project Damages

Figure 1. Site 1. Looking downstream at end of site at the stairs and dock in background. Damaged levee toe and loss of embankment.

Figure 2. Site 1. Damaged levee toe extending upstream. Note existing piling underwater. Toe erosion approximately 5 feet high by 10 feet wide.

Figure 3. Site 1. Existing piling at toe. Erosion of toe.

Figure 4. Site 1. Existing 12-inch diameter piling spaced 5 feet on center.

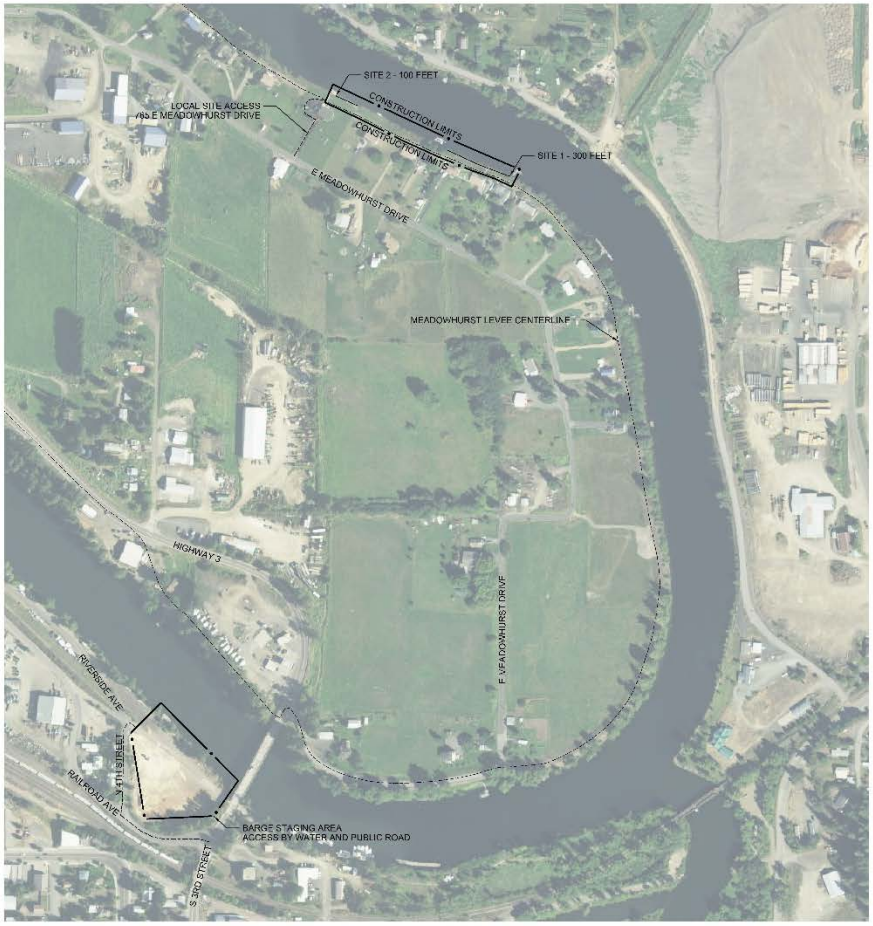
Figure 5. Site 2. Standing on intact section looking upstream at site extending to dock in background.

Figure 6. Site 2. Erosion of levee toe and slope. No existing piling.

Figure 7. Intact levee section between sites 1 and 2 with functional design. Piling driven at the toe with close spacing, backfilled with large riprap.

Figure 8. Intact levee section between sites includes piling with large rocks in the toe. Pile spacing approximately 3 feet on center.

Attachment C – Draft Cross Section



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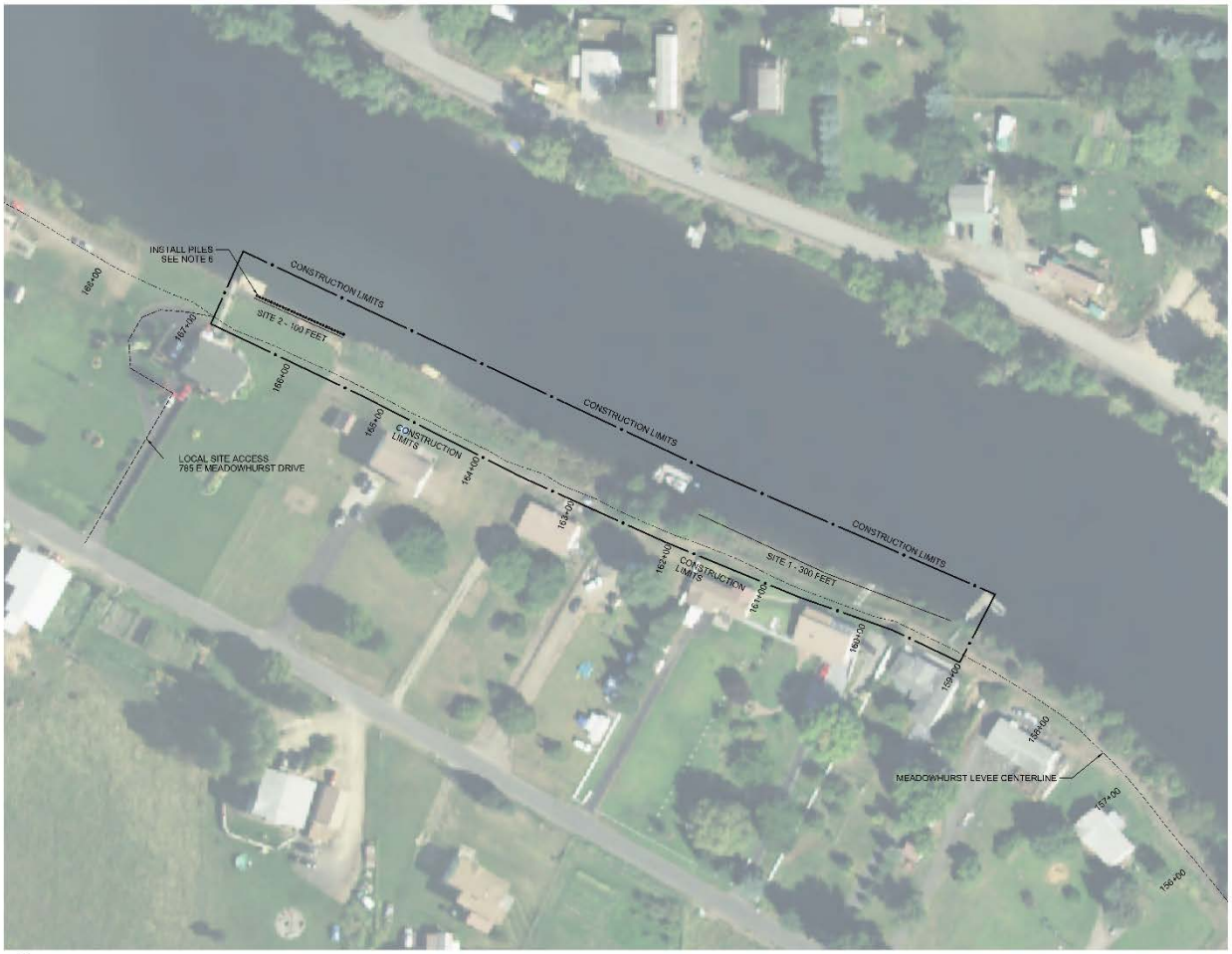
1 GENERAL SITE PLAN

CS101 SCALE: 1" = 200'-0"

0 200' 400'

GENERAL NOTES

1. CONSTRUCTION BY BARGE FROM ST JOE RIVER. NO ACTIVITIES ARE PLANNED FROM THE LEVEE TOP.
2. STAGING AREA LOCATED ON SOUTH SIDE OF HIGHWAY 3 BRIDGE OVER ST JOE RIVER, OFF OF N 4TH STREET AND RAILROAD AVE.
3. LOCAL ACCESS AVAILABLE THROUGH DRIVEWAY OF LANDOWNER AND LEVEE SPONSOR AT 765 E MEADOWHURST DRIVE.



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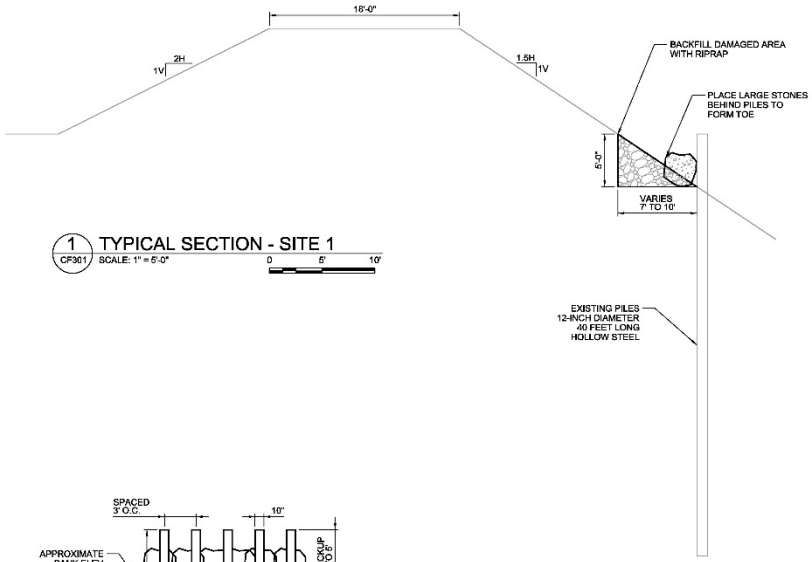
1 CS102 SITE PLAN

SCALE: 1" = 50'-0"

0 50' 100'

GENERAL NOTES

1. CONSTRUCTION BY BARGE FROM ST JOE RIVER. NO ACTIVITIES ARE PLANNED FROM THE LEVEE TOP. USE OF CRANE WITH PILE DRIVER ON BARGE REQUIRES NAVAL ARCHITECT ANALYSIS PER EM 385-1-1, 16.I. FLOATING CRANES/DERRICKS, CRANE BARGES, AND AUXILIARY SHIPBOARD-MOUNTED CRANES.
2. STAGING AREA LOCATED ON THE SOUTH SIDE OF HIGHWAY 3 BRIDGE OVER ST JOE RIVER, OFF OF N 4TH STREET AND RAILROAD AVE.
3. LOCAL ACCESS AVAILABLE THROUGH DRIVEWAY OF LANDOWNER AND LEVEE SPONSOR AT 785 E MEADOWHURST DRIVE.
4. SITE 1 IS APPROXIMATELY 300 FEET LONG WITH EXISTING PILES AT THE TOE. EXISTING PILES ARE 12-INCH DIAMETER, HOLLOW STEEL, 40 FEET LONG. SPACING VARIES.
5. SITE 2 IS APPROXIMATELY 100 FEET LONG WITH NO EXISTING PILES.
6. AT SITE 2, INSTALL NEW PILES 3 FEET O.C. PILES ARE 10-INCH DIAMETER, HOLLOW STEEL, 40 FEET LONG. NO SPLICING WILL BE PERMITTED.



1 CF301 TYPICAL SECTION - SITE 1
SCALE: 1" = 5'-0" 0 5' 10'

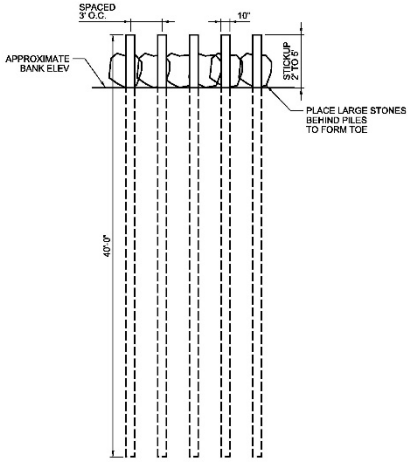
GENERAL NOTES

1. CONSTRUCTION BY BARGE FROM ST. JOE RIVER. NO ACTIVITIES ARE PLANNED FROM THE LEVEE TOP.
2. SITE 1 IS APPROXIMATELY 300 FEET LONG FROM STATION 159+00 TO 162+00 [NLD]. THIS SITE HAS EXISTING PILES AT THE TOE THAT ARE 12-INCH DIAMETER, HOLLOW STEEL, 40 FEET LONG. SPACING VARIES 3 TO 6 FEET O.C.
3. SITE 2 IS APPROXIMATELY 100 FEET LONG FROM STATION 165+50 TO 166+50 AND HAS NO EXISTING PILES.
4. AT SITE 2, INSTALL NEW PILES 3 FEET O.C. PILES ARE TO BE PROVIDED BY THE SPONSOR AND ARE DESCRIBED AS 10-INCH DIAMETER, HOLLOW STEEL, 40 FEET LONG. SPLICES WILL NOT BE PERMITTED.
5. MINIMUM EMBEDMENT DEPTH 25 FEET.
6. PLACE LARGE STONES IMMEDIATELY BEHIND PILES TO FORM TOE. BACKFILL REMAINING VOID WITH RIPRAP.

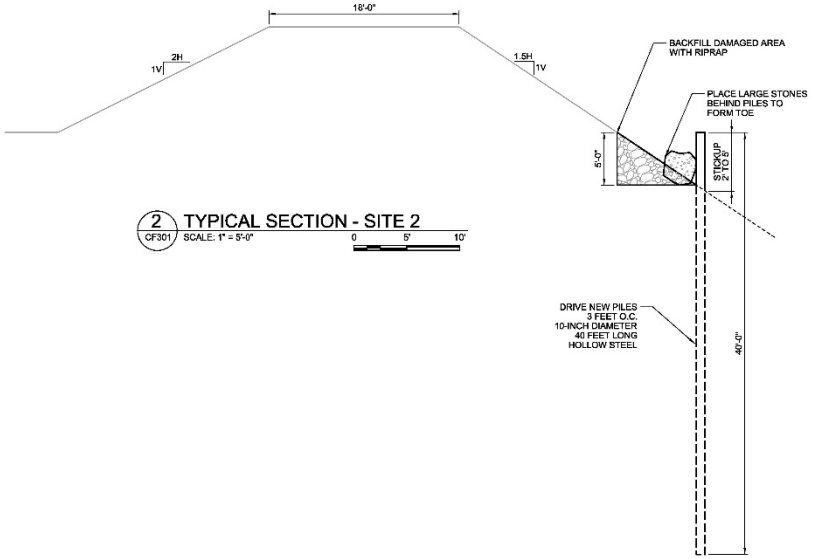
RIPRAP GRADATION - CLASS II

100% SMALLER THAN	18 INCH	500 LBS
50% SIZE	13 INCH	200 LBS
90% LARGER THAN	10 INCH	100 LBS
10%	6-10 INCH	25-100 LBS
TOLERANCE	+6 INCH	
LARGE STONE SIZE	32 INCH	
TOLERANCE	+12 INCH	

MATERIAL QUANTITIES	SITE 1	SITE 2
CLASS II RIPRAP	450 TON	150 TON
LARGE STONES	140 EACH	50 EACH
STEEL PILES	0 EACH	34 EACH



3 CF301 PILE SPACING DETAIL - SITE 2
SCALE: 1" = 5'-0" 0 5' 10'



2 CF301 TYPICAL SECTION - SITE 2
SCALE: 1" = 5'-0" 0 5' 10'